

Akt (Phospho-Ser473) Polyclonal Antibody

ORDERING INFORMATION

Catalog No.: 43054

Format: 100ul at 1.0mg/ml in PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Affinity-purified on phosphopeptide; non-phosphopeptide-reactive antibodies were removed by chromatography on non-phosphorylated peptide.

BACKGROUND

Akt, also known as Akt1 and Protein kinase B (PKB), is a serine/threonine-specific protein kinase that plays a key role in multiple cellular processes such as glucose metabolism, apoptosis, cell proliferation, transcription and cell migration. Akt1 is also able to induce protein synthesis pathways and is, therefore, a key signaling protein in the cellular pathways that lead to skeletal muscle hypertrophy, and general tissue growth. Since it can block apoptosis, and thereby promote cell survival, Akt1 has been implicated as a major factor in many types of cancer.

SPECIFICATION SUMMARY

Antigen: Peptide sequence that includes phosphorylation sites of serine 473 (Q-F-S(p)-Y-S) derived from human Akt and conjugated to KLH.

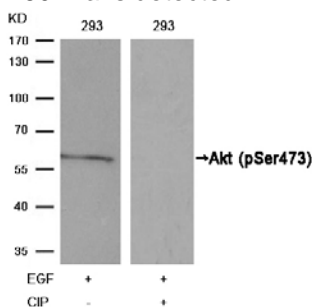
Accession no.: P31749, NP_001014431.1

Host Species: Rabbit

Specificity: This antibody detects endogenous human, mouse, and rat Akt only when phosphorylated at serine 473.

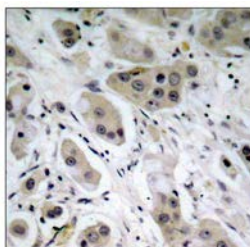
APPLICATION

Immunoblotting: use at dilution of 1:500-1:1,000. A band of ~60kDa is detected.

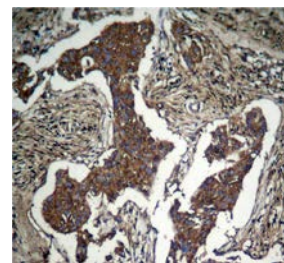


Detection of Akt (phospho-Ser473) in extracts of 293 cells untreated or treated with EGF or calf intestinal phosphatase.

Immunohistochemistry: use at dilution of 1:50-1:100.



Detection of Akt (phospho-Ser473) in paraffin-embedded human breast carcinoma tissue.



Detection of Akt (phospho-Ser473) in paraffin-embedded human lung carcinoma tissue.

These are recommended working dilutions. Enduser should determine optimal dilutions for their applications.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Can be stored at 4°C for short-term use.

For in vitro investigational use only. Not intended for therapeutic or diagnostic applications.